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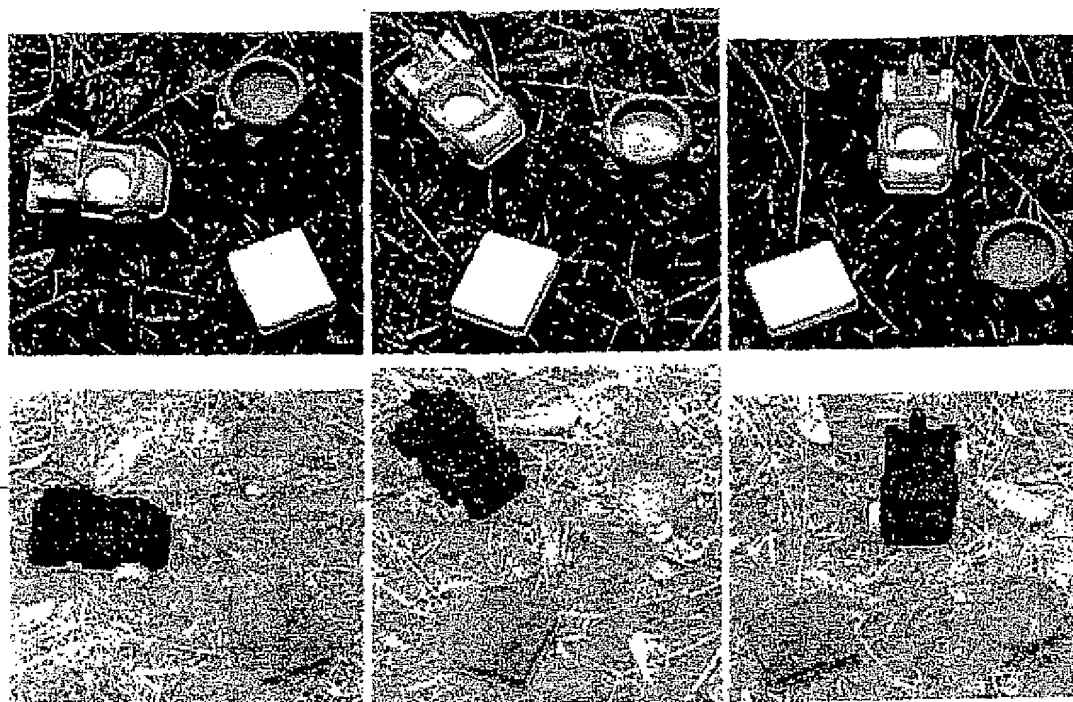


Figure 1 Original images separated by a 3D rotation of  $45^\circ$  and  $90^\circ$  (top) and matching results (bottom), displayed in same colors).

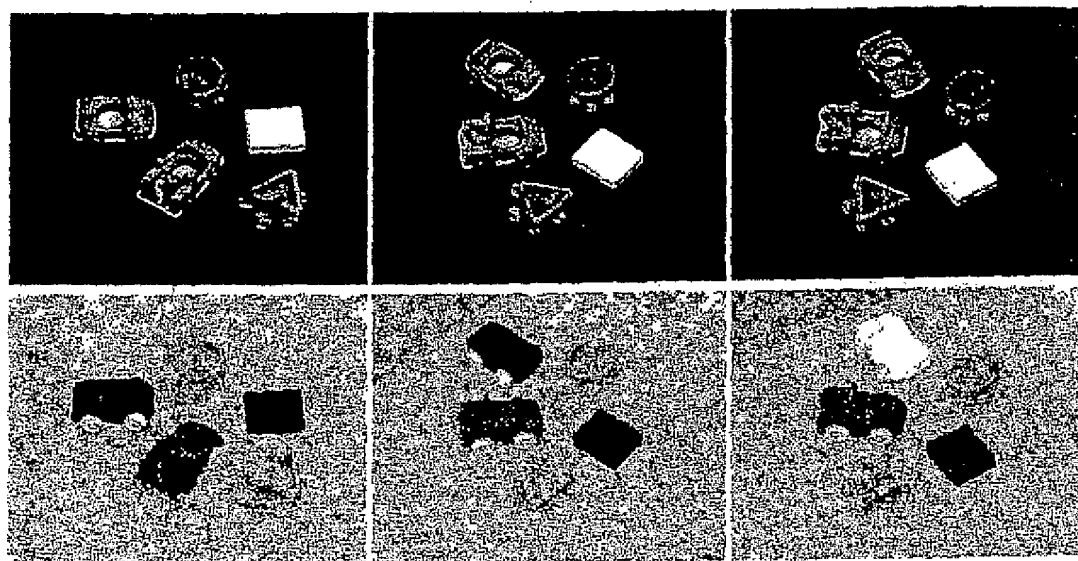


Figure 2 Original images separated by a 3D rotation of  $45^\circ$  and  $60^\circ$  (top) and matching results (bottom).

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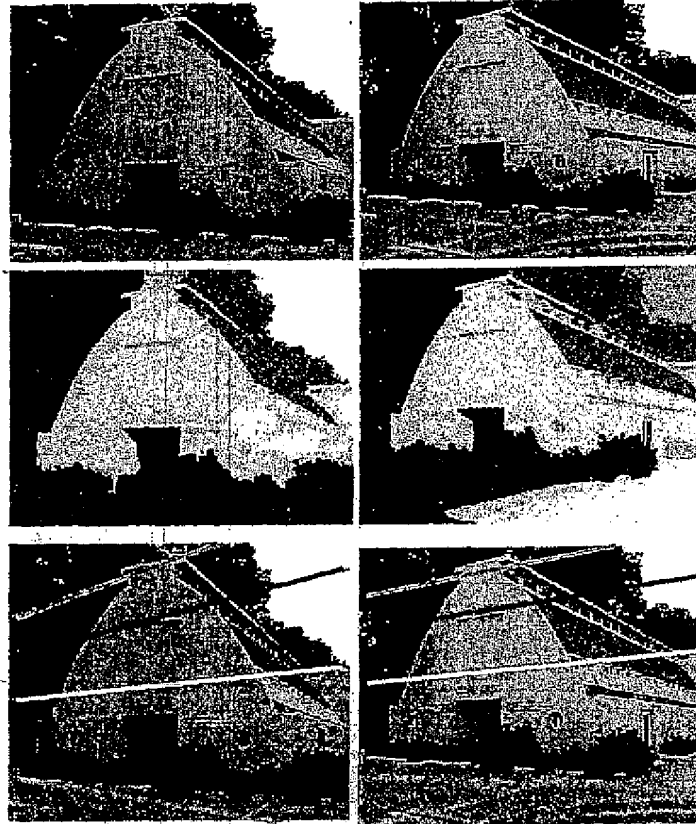


Figure 3: Original images (top), matched aggregates (middle) and epipolar lines (bottom).

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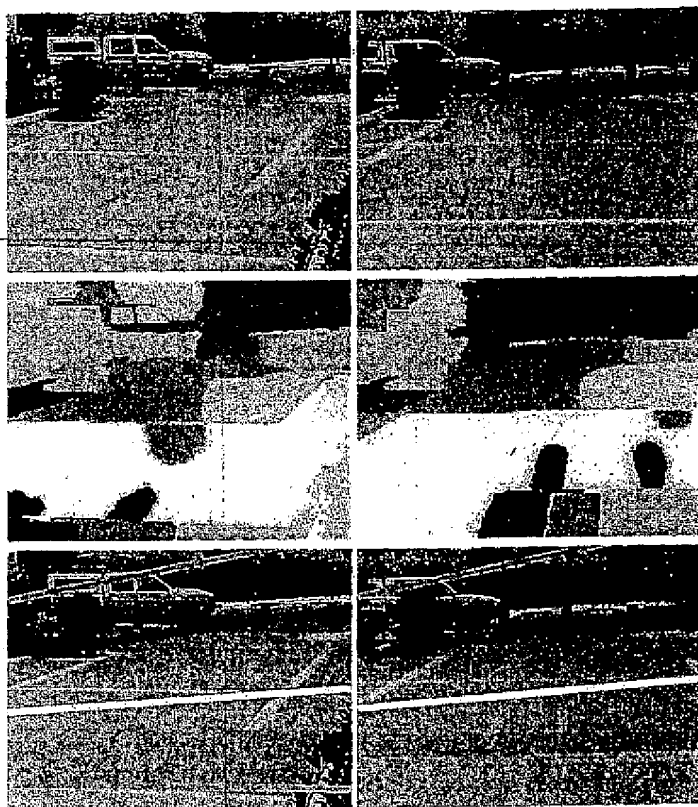


Figure 4 Original images (top), matched aggregates (middle) and epipolar lines (bottom).

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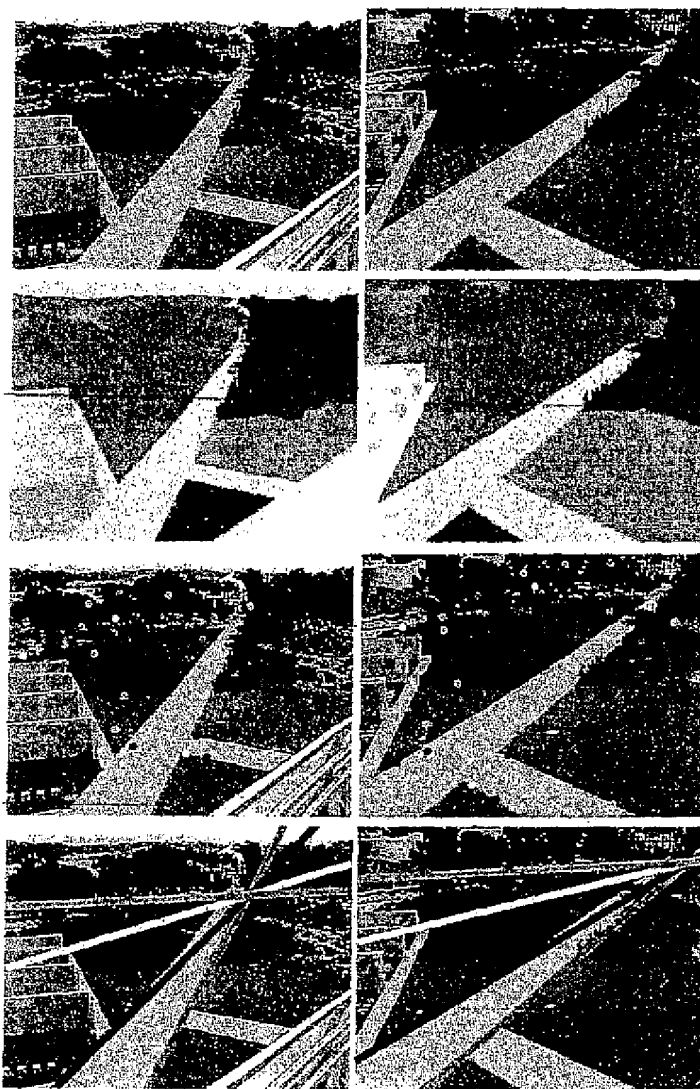


Figure 5 Original images (top), matched aggregates (2nd row), some of the matching aggregates centroids used for RANSAC (3rd row) and epipolar lines (bottom).

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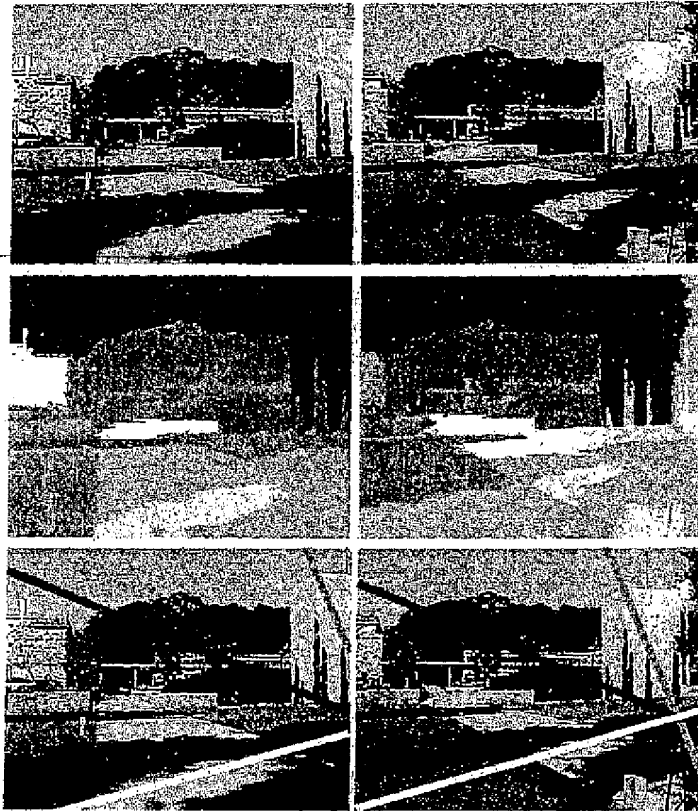


Figure 6 · Original images (top, notice the tripod at the bottom right corner), matched aggregates (middle) and epipolar lines (bottom).

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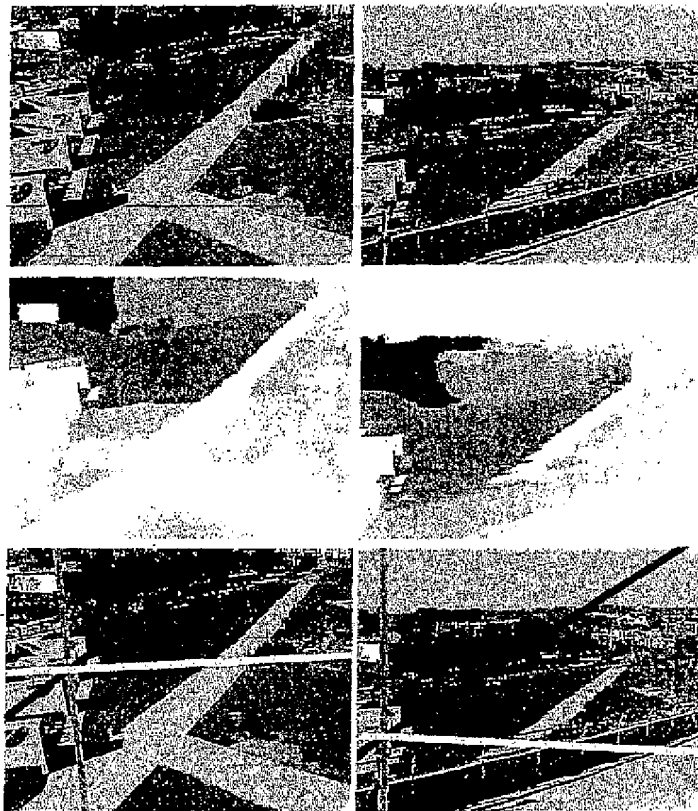


Figure 7 Original images (top, notice the tripod at the bottom left corner), matched aggregates (middle) and epipolar lines (bottom).

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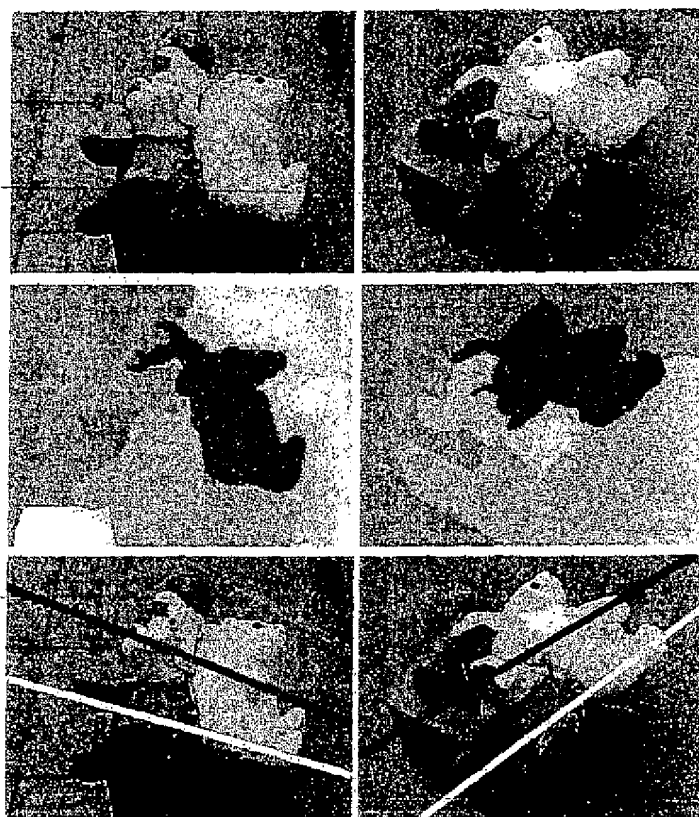


Figure 8 Original images (top), matched aggregates (middle) and epipolar lines (bottom).

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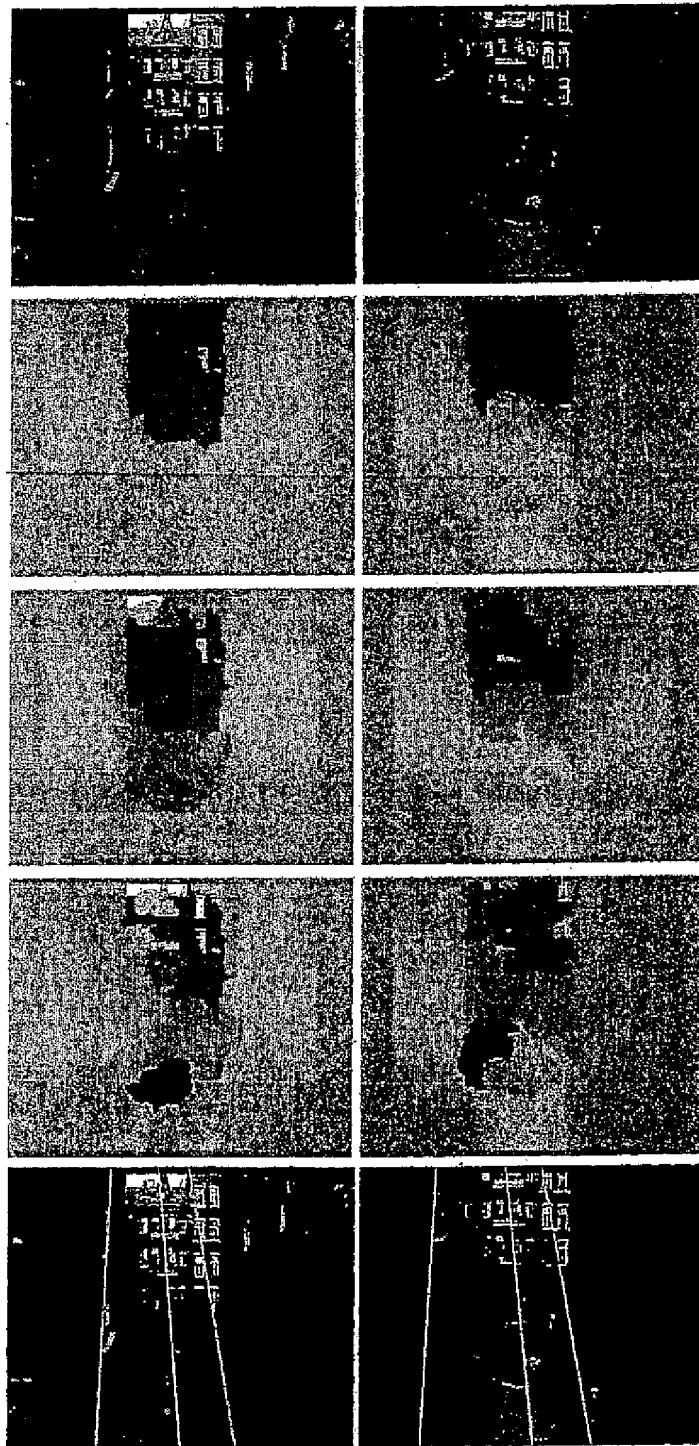


Figure 9 Original images: "Lola1", "Lola2" (top), matched aggregates in scales 10, 9 and 8 (middle) and epipolar lines (bottom).



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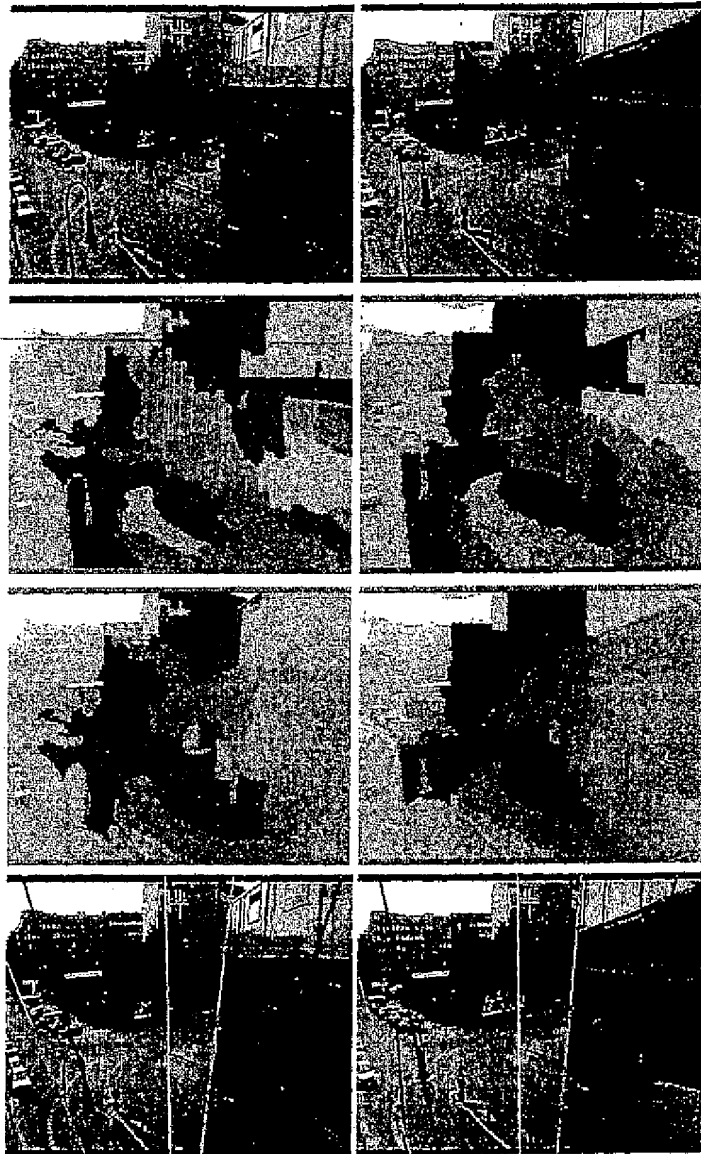


Figure .10: Original images: "Lola3", "Lola4" (top), matched aggregates in scale 9 using: fundamental matrix (2nd row), soft matching (3rd row), and epipolar lines (bottom).

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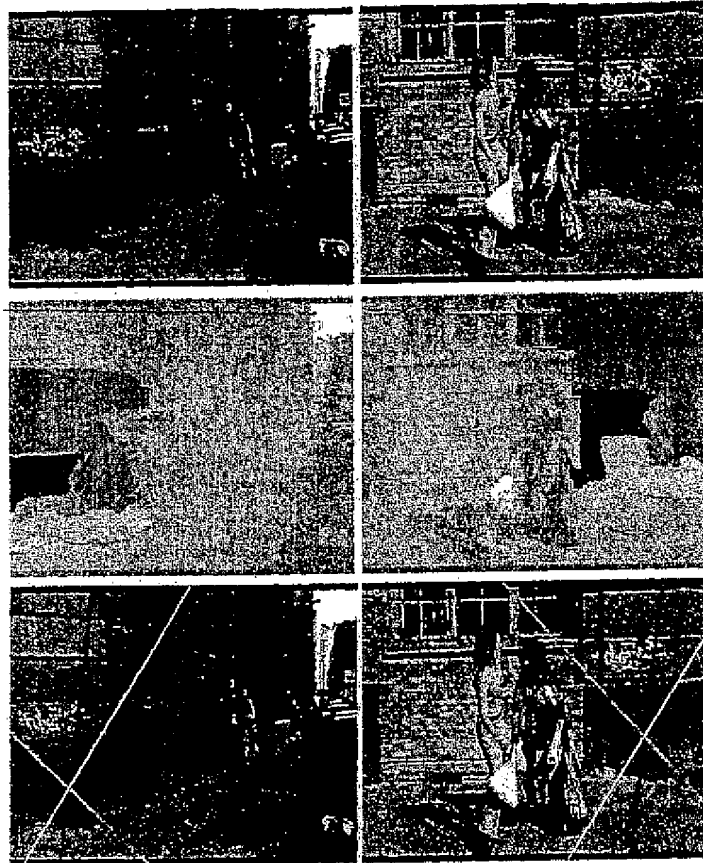


Figure .11: Original images: "Lola5", "Lola6" (top), matched aggregates in scale 9 (middle), and epipolar lines (bottom).

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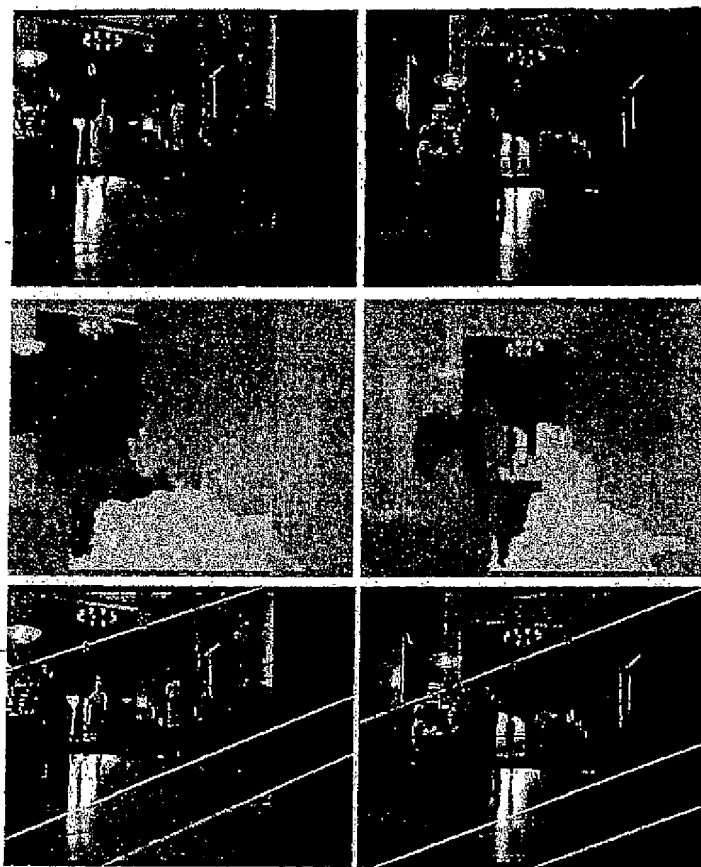


Figure 12: Original images: "Lola7", "Lola8" (top), matched aggregates in scale 9 (middle), and epipolar lines (bottom).

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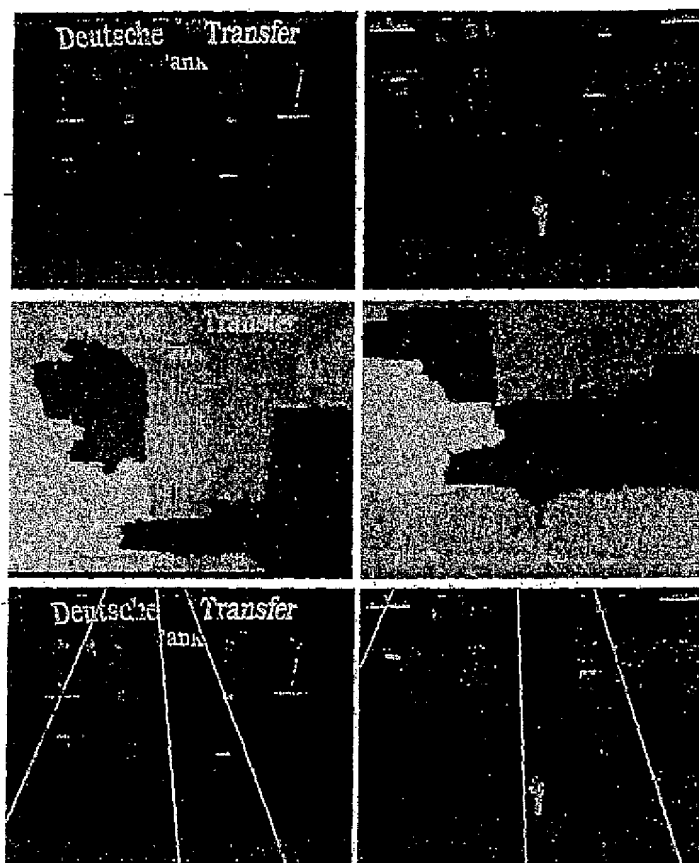


Figure 13: Original images: "Lola9", "Lola10" (top), matched aggregates in scale 10 (middle), and epipolar lines (bottom).

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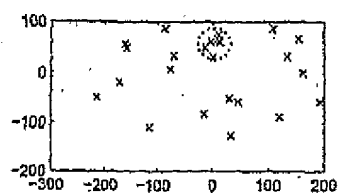


Figure 14: Disparity map of all matches found. Those of the correct matches form a compact cluster (marked by the dotted circle).

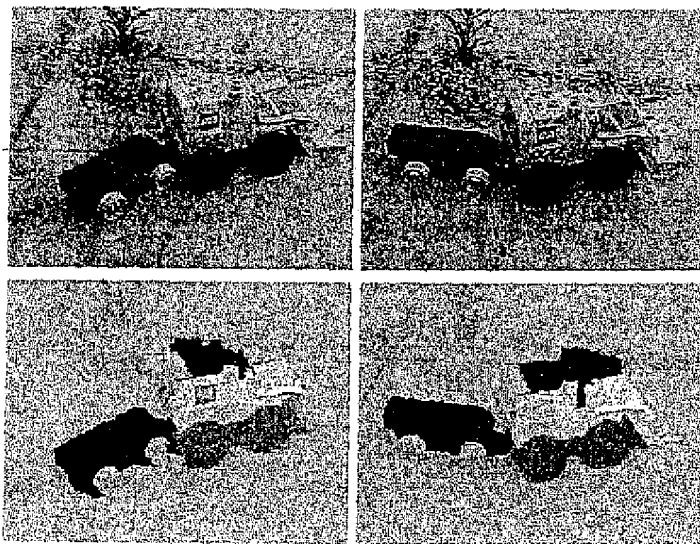


Figure 15: Original images (top) and matched aggregates (bottom).

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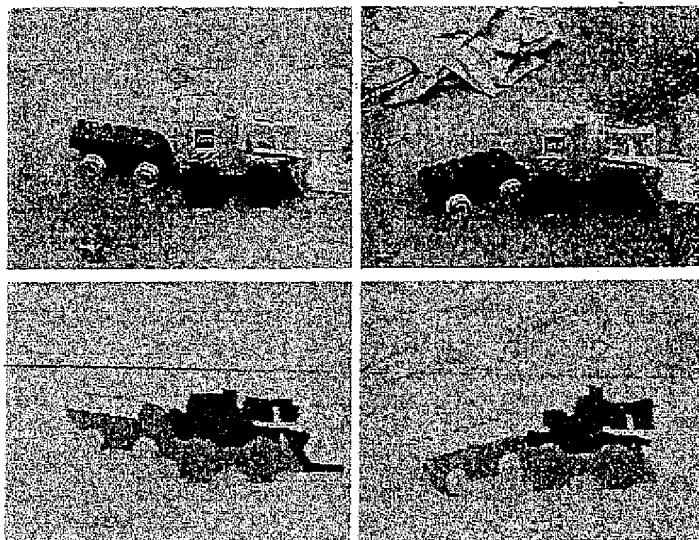


Figure 16: Original images (top) and matched aggregates (bottom).

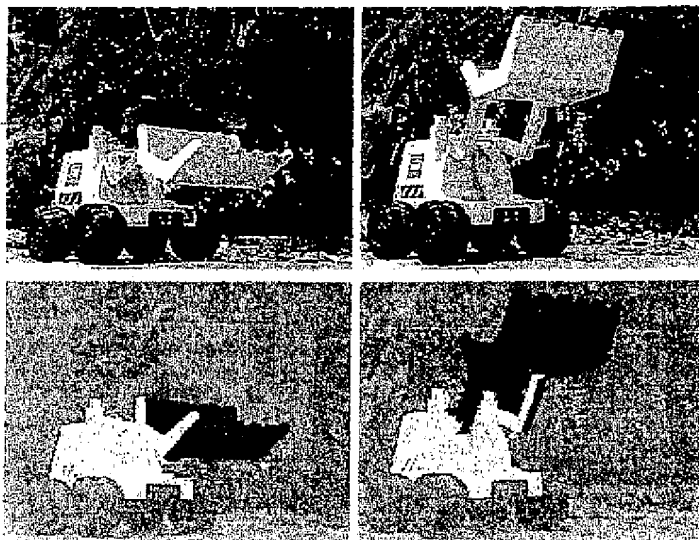


Figure 17: Original images (top) and matched aggregates (bottom).

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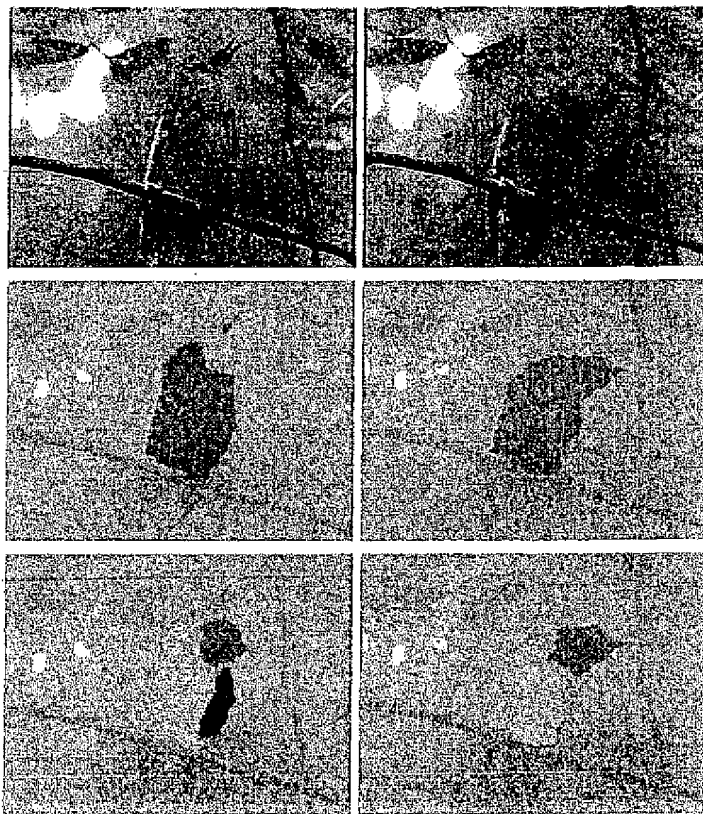


Figure 18: Original images (top), matched aggregates in scale 10 (middle) and in scale 9 (bottom).

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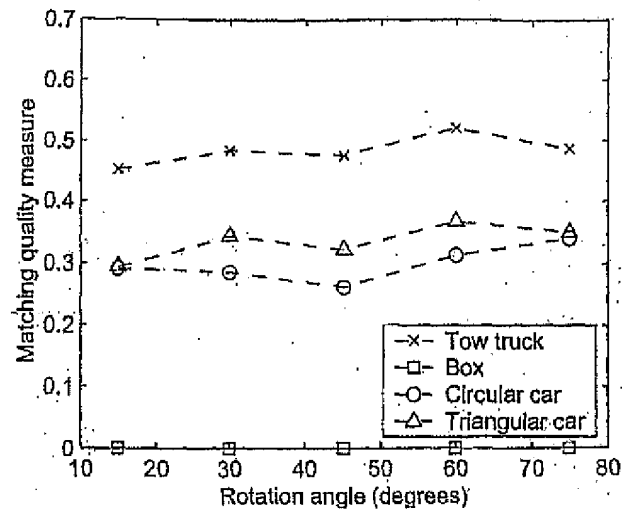


Figure 19: Quality measure for matching the regular car (A) to the other four toys.

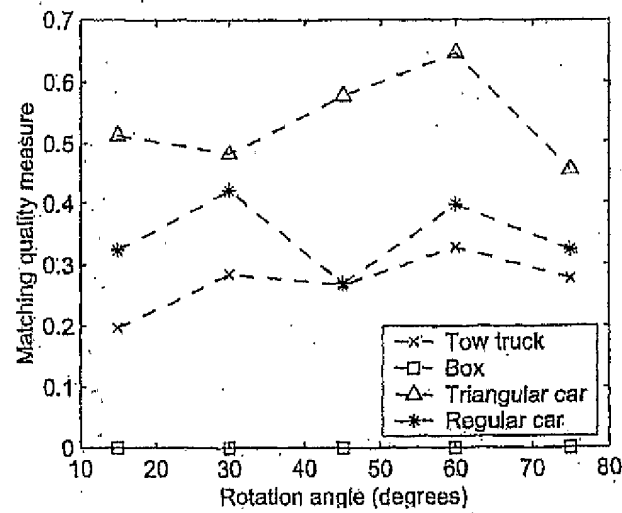


Figure 20: Quality measure for matching the circular car (B) to the other four toys.



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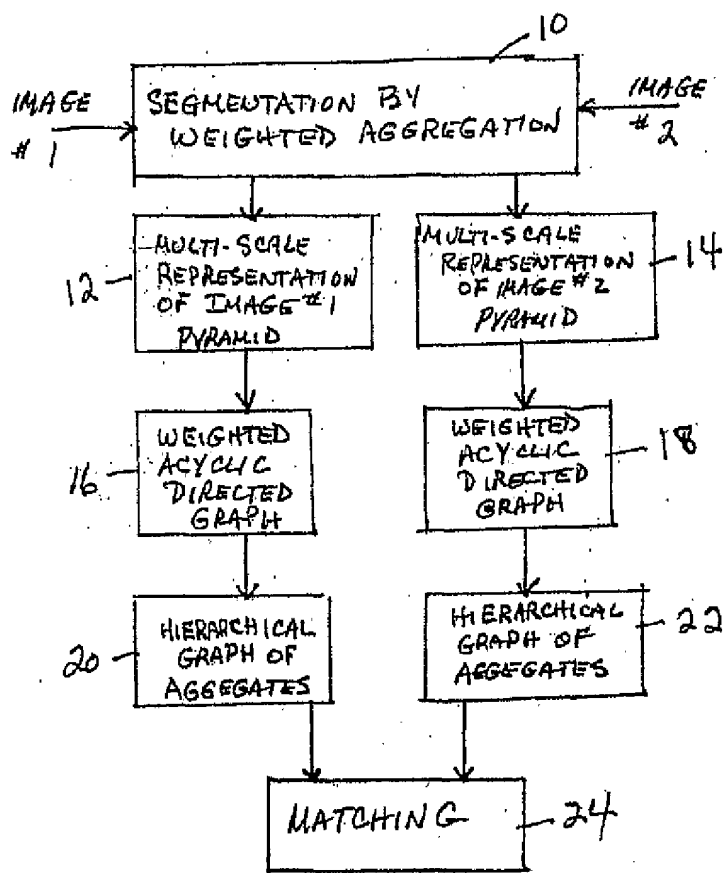


FIGURE 21

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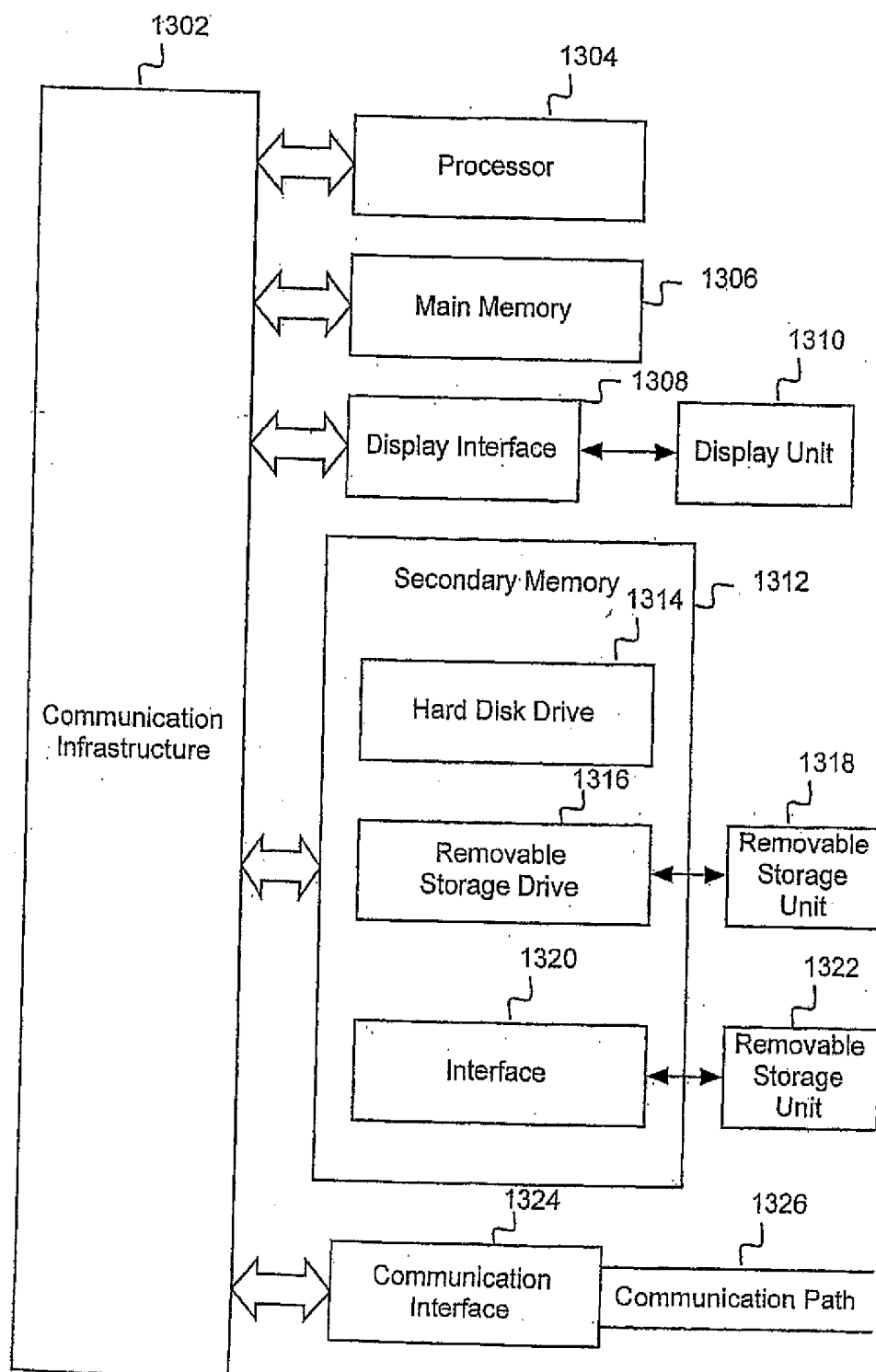


FIG. 22

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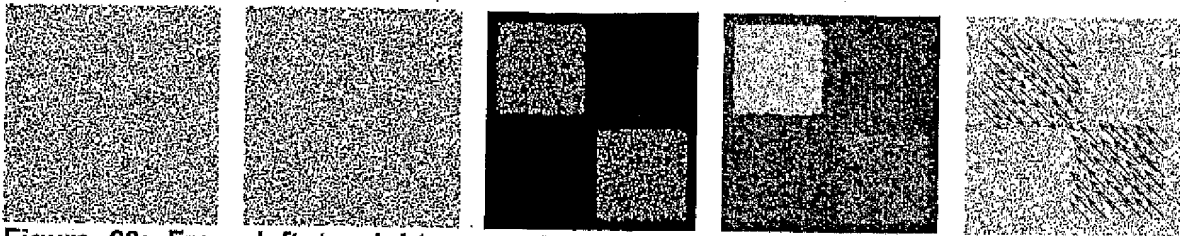


Figure 23: From left to right: a random dot pair containing two translating squares, a difference image, segmentation results obtained with our method, and motion vectors obtained from peaked aggregates at levels 4-5.

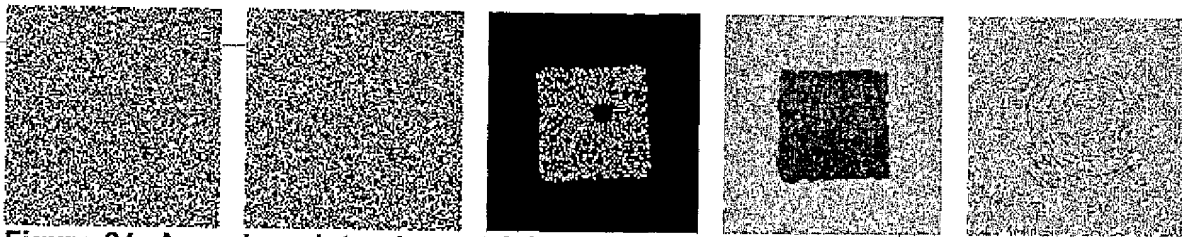


Figure 24: A random dot pair containing a central, rotating square, a difference image, segmentation results obtained with our method, and motion vectors.

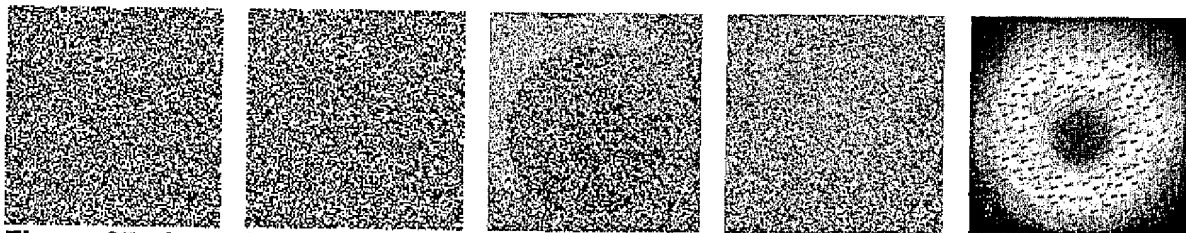


Figure 25: A random dot pair containing two spheres translating in 3D, results obtained by applying our method with affine transformation only, results obtained by applying a comparison of fundamental matrices at the coarsest levels, and motion vectors overlaid on a depth image (intensity proportional to distance from camera).

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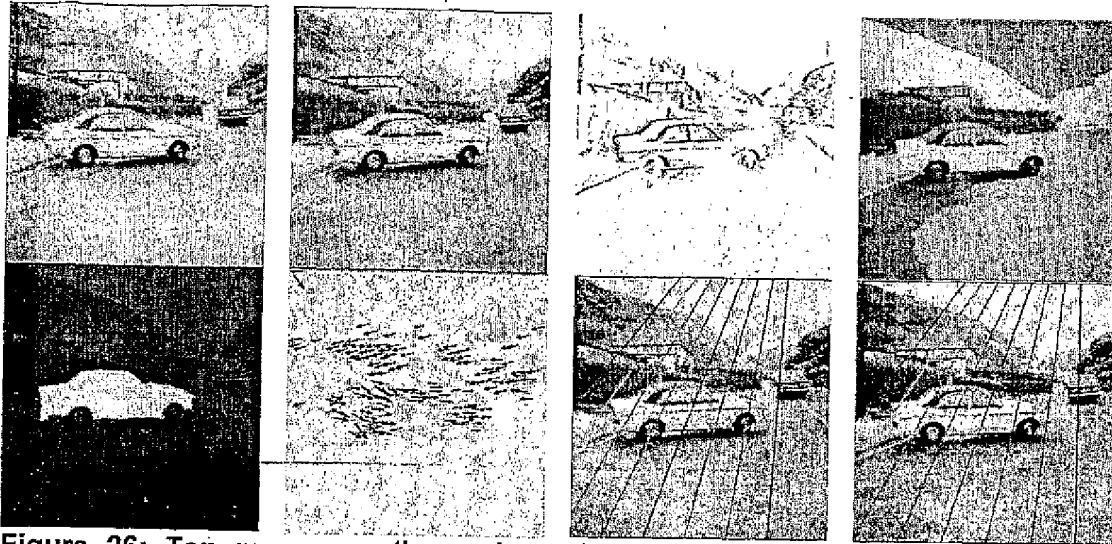


Figure 26: Top row: a motion pair, a difference image, results obtained by applying segmentation based on intensity cues alone. Bottom row: results obtained by applying our method with both motion and intensity cues, motion vectors, and epipolar lines computed for the background segment.



Figure 27: A motion pair, a difference image, results obtained by applying segmentation based on intensity cues alone, results obtained by applying our method with both motion and intensity cues, and motion vectors.



Figure 28: A motion pair, a difference image, results obtained by applying our segmentation method, and motion vectors.

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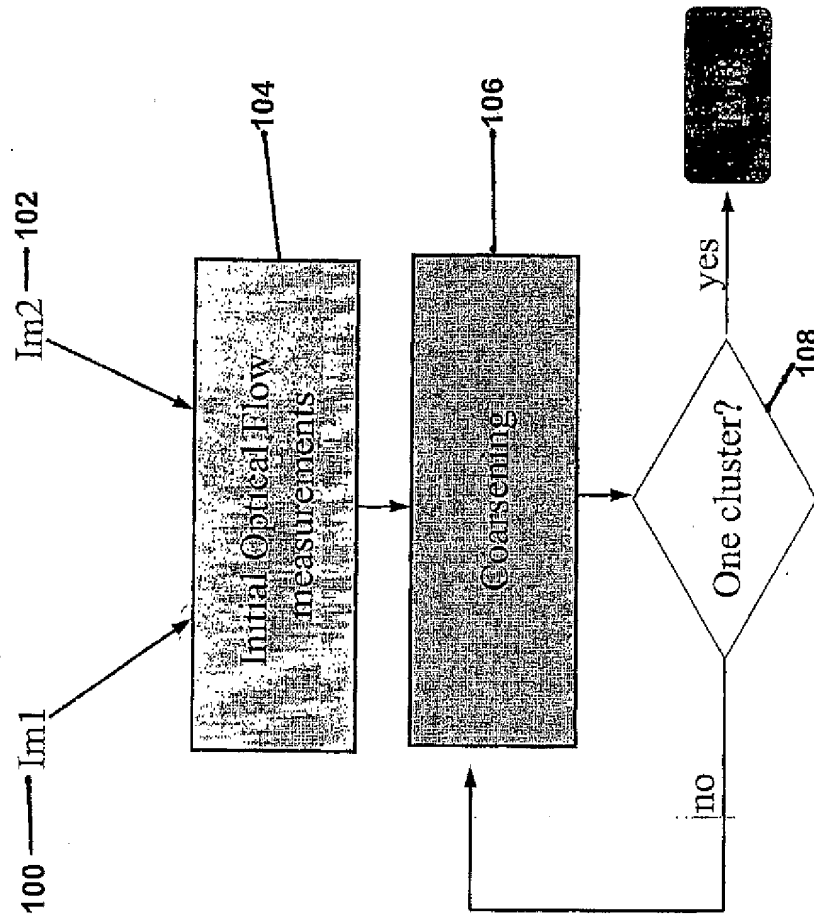
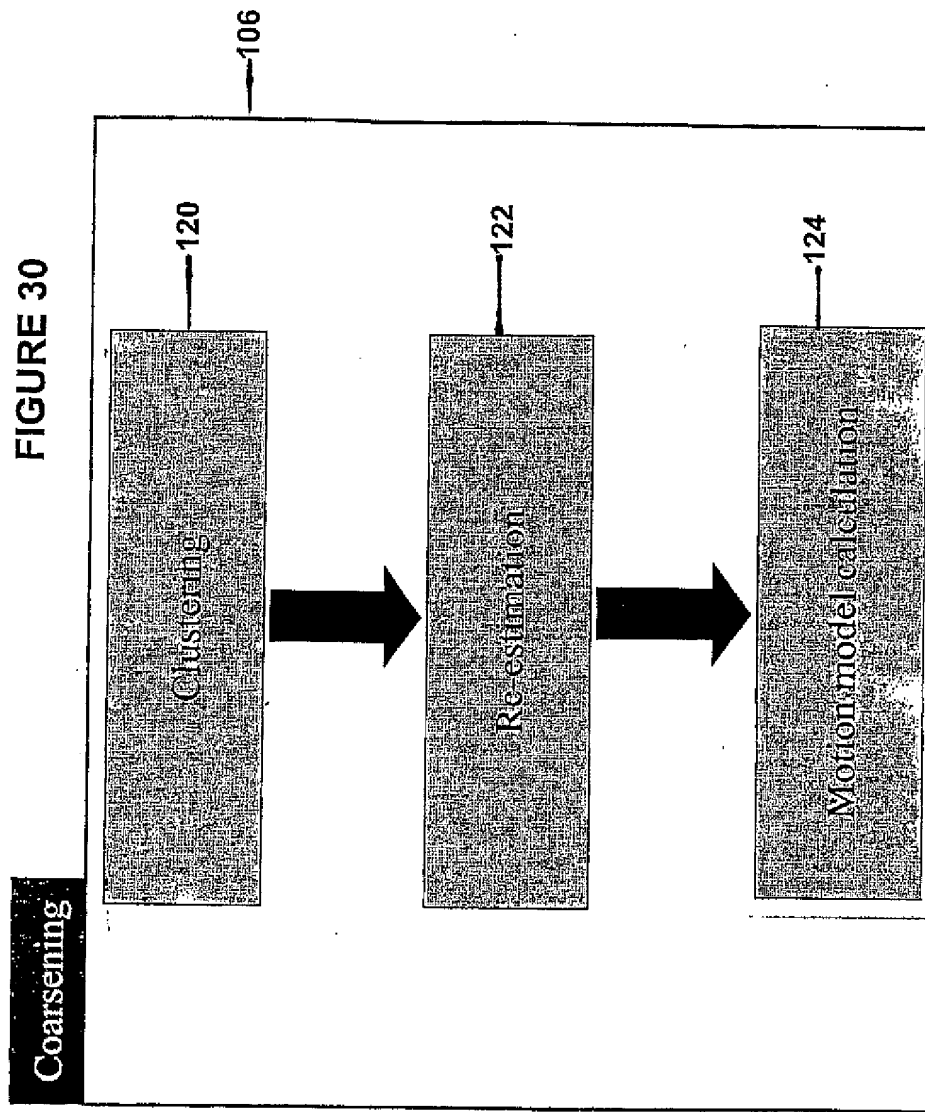


FIGURE 29

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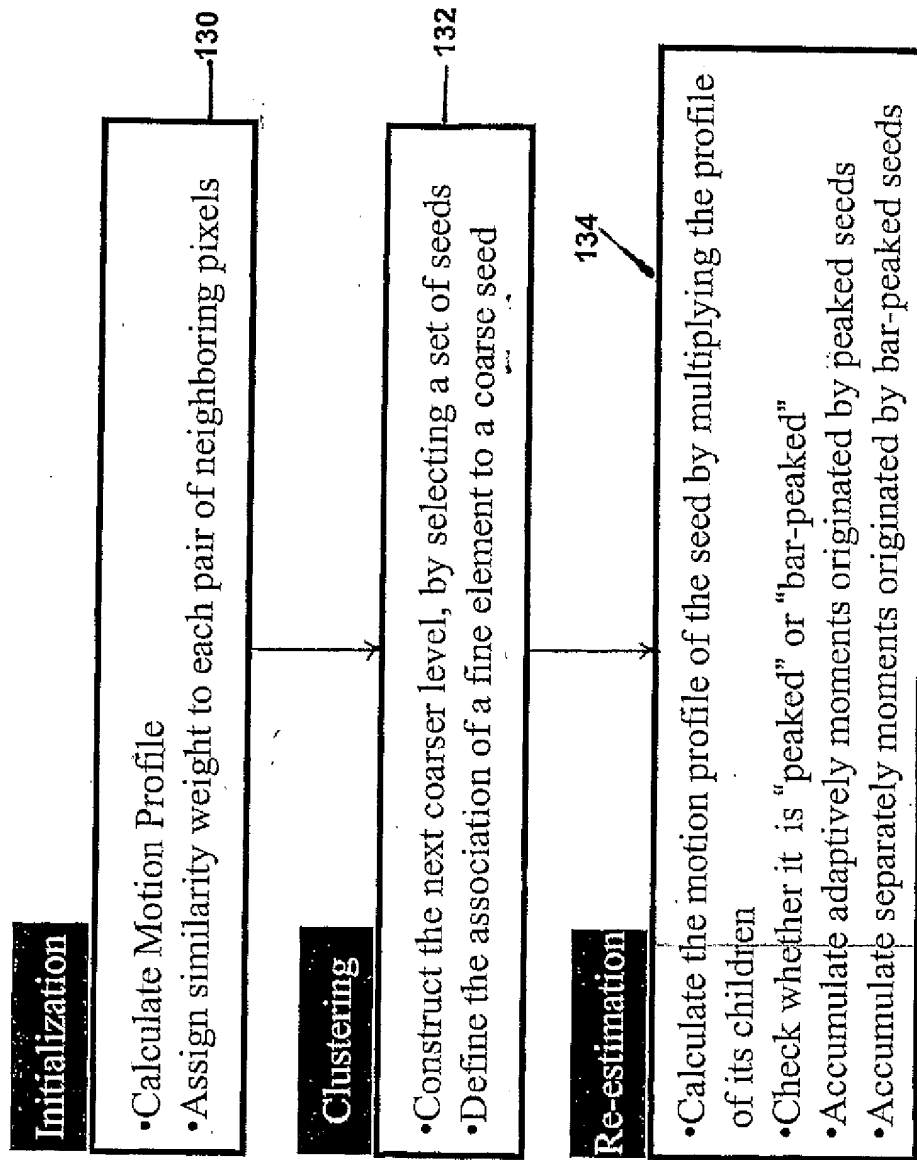


FIGURE 31a

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**Motion model calculation**

- Select a motion model according to accumulated number of constraints:
  - Translation (based on motion profile)
  - Affine transformation (based on peaked and bar-peaked constraints)
  - Fundamental matrix (from peaked constraints)
- Calculate for each neighboring seeds cross correlation distance, affine distance, and fundamental matrix distance
- Modify the similarity between neighboring seeds according to the calculated distances

**FIGURE 31b**